

IN THE SPECIFICATION

Please amend paragraph [0020] at page 6 as follows:

[0020] Transport stream adapter 42 adapts for a type of signal input to DTV modulator system 12. In one embodiment, transport stream adapter 42 checks for empty bits or “stuffing” in the transport stream. These empty bits are necessary for proper framing, but are not otherwise useful as data. Transport stream adapter 42 also checks a header of the input stream data. In one embodiment, for example, ~~blocks 12 and 13~~ inputs 14 and 16 provide information on channel capacity. Transport stream adapter 42 adapts the transport stream by adding or removing stuffing based on the determined capacity. For example, in one embodiment, 16-QAM (quadrature amplitude modulation) using 4-bit processing is converted to 64-QAM, which uses 6-bit processing.

Please amend paragraph [0055] at pages 18-19 as follows:

[0055] Figure 6 shows in greater detail a block diagram of one embodiment of the RF converter 84. In the embodiment shown in Figure 6, a direct digital synthesis (DDS) circuit 122 supplied with a clock signal 124 ~~derived~~ , derived from a crystal oscillator and frequency multiplier 196a, is used to produce a clean, agile frequency reference. DDS circuit 122, for example, is a combination of a numerically controlled oscillator (NCO), a multiplier, a D/A converter and a comparator. DDS circuit 122 is used for generation of a clock signal with a programmable frequency. In one embodiment, the operating frequency of DDS circuit 122 is programmed to be an integer fraction of the difference between the two local oscillators 130 and 132, i.e., $(f_2 - f_1)/N$, where N is chosen so that DDS circuit 122 output frequency is the highest possible frequency below 20 MHz.